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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/901,700	07/11/2001	Taizou Hori	35.C13989 DI	4474

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EXAMINER

FLETCHER, JAMES A

ART UNIT PAPER NUMBER

2621

DATE MAILED: 06/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/901,700

Applicant(s)

HORI ET AL.

Examiner

James A. Fletcher

Art Unit

2621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 November 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 27-51 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 27-51 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***New Art Unit***

1. Please include the new Art Unit 2621 in the caption or heading of any written or facsimile communication submitted after this Office Action because the examiner, who was assigned to Art Unit 2616, will be assigned to new Art Unit 2621. Your cooperation in this matter will assist in the timely processing of the submission and is appreciated by the Office.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 27-30, 33-41, and 44-51 are rejected under 35 U.S.C. 102(b) as being anticipated by Takimoto (5,966,496).

**Regarding claims 27, 36, 45, and 47-51**, Takimoto discloses an apparatus and method for reproducing information signals recorded in a plurality of recording modes each having different amounts of information signal recorded per unit time (Figures 1, 2, and 5) and at different speeds (Table 1) comprising:

- reproduction heads for scanning and reproducing information signals recorded in the plurality of recording modes from a recording medium (Fig. 2, items 4 & 5);

- memory means for storing an information signal reproduced by said reproduction means (Fig 11, item 104);
- mode discrimination means for discriminating a recording mode of the information signal reproduced by the reproduction means (Col 7, line 45);
- reproduction in both modes being carried out by the same pair of heads (Col 6, lines 53-58);
- tracking means for controlling racking between the recording medium and the reproduction means (Fig, 2, items 6-15);
- control means for controlling a tracking operation of the tracking means in different manners, in accordance with a discrimination result of the mode discrimination means (Fig 2, item 16); and
- control means for changing a period at which the information signal reproduced by the reproduction means is written into the memory means in accordance with a discrimination result of the discrimination means (Fig 12 steps S45, S49, and S52).

**Regarding claims 28 and 37,** Takimoto discloses an apparatus wherein the plurality of recording modes record at different speeds (Table 1) with the slower speed records less data per unit time than the faster speed (Table 1 and Fig. 5).

**Regarding claims 29 and 38,** Takimoto discloses an apparatus wherein the information signal includes an image signal (Col 1, lines 13-20), and the image signal of one frame is recorded in  $n > 2$  tracks in the first mode, and the image signal of one frame is recorded in  $m < n$  tracks in the second mode (Fig. 5).

**Regarding claim 30**, Takimoto discloses an apparatus wherein the control means changes a period at which an information signal reproduced with the first head is written into the memory means in accordance with the recording mode discriminated by the mode discrimination means (Figs. 12 & 15).

**Regarding claims 33 and 39**, Takimoto discloses an apparatus wherein the information signal is a compressed image signal (Col 4, lines 54+) which is recorded in a plurality of tracks of the recording medium (Fig 10), and wherein the control means writes an image signal reproduced by the reproduction means into the memory on a track basis (Figs 12 and 15).

**Regarding claims 34-35, 40, and 44**, Takimoto discloses an apparatus comprising means for expanding the information stored in the memory in accordance with the result of the mode discrimination means and error correction means (Col 5, line 58 – Col 6, line 4).

**Regarding claim 41**, Takimoto discloses an apparatus wherein the medium is a tape (Col 3, lines 6-8).

**Regarding claim 46**, Takimoto discloses an apparatus wherein the tracking means outputs a tracking error signal using the reproduced information signal, and wherein the control means generation timing of the tracking error signal in accordance with the discrimination means result (Col 4, lines 1-23).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2621

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 31 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takimoto as applied to claims above, and further in view of Law (3,3728,228).

**Regarding claims 31 and 42,** Takimoto discloses an apparatus wherein the number of heads used for reproduction is based on the mode of reproduction (Col 6, lines 53-58), but does not specifically disclose using a single head for reproduction in the slower data rate mode.

Law teaches a system of recording data on a tape wherein a reduction in signal elements is attained by providing recorded signals to a memory on the basis of the head providing the signal (Col 2, lines 62-70), providing the user with a reduced quality signal, but being economical of the recording medium.

As suggested by Takimoto ~~and taught by Law~~, providing a signal to a memory from a single head is a well known method of saving storage media space at the expense of image quality.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Takimoto in order to provide a signal to the image memory from a single head.

6. Claims 32 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination as applied to claims above, and further in view of Baumeister et al (4,931,883).

TTG  
6/25/06

**Regarding claims 32 and 43**, Takimoto is silent on the topic of writing to the memory irrespective of the detected recording mode.

Baumeister teaches reading a scan track multiple times, irrespective of the recording mode (Col 2, lines 44-58).

As taught by Baumeister, scanning a record track multiple times irrespective of the detected recording mode provides a continuous signal to the detector without the need for additional switching or memory, and provides the user with an adequate image in a low-cost device.


Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Takimoto in order to provide repeated scanning of a scan track.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James A. Fletcher whose telephone number is (571) 272-7377. The examiner can normally be reached on 7:45-5:45 M-Th, first Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Groody can be reached on (571) 272-7950. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JAF  
25 June 2006



THAI TRAN  
PRIMARY EXAMINER